

New Jersey Department of Transportation

1986 Annual Report

NJ
HE
28
N5
A5
1986
C.3

Thomas H. Kean
Governor

Hazel Frank Gluck
Commissioner

- 1891** *New Jersey became the first state to extend aid to local roads by enactment of the State Road Aid Law.*
- 1892-94** *The president of the State Board of Agriculture was responsible for administering the State Road Aid Law.*
- 1894-1917** *The Commissioner of Public Roads took over from the President of the Board of Agriculture.*
- 1917-35** *The State Highway Department, governed by an eight-member commission which selected a new chairman each year, assumed responsibility for New Jersey's roads.*
- 1935-66** *The State Highway Department fell under the jurisdiction of one Commissioner appointed by the Governor.*
- 1947** *The New Jersey Constitution was revised to create a single state fund for all monies, including revenue from the gas tax.*
- 1966** *The Legislature established an overall Department of Transportation to be administered by a single Commissioner appointed by the Governor.*
- 1979** *The Commissioner of Transportation was made ex officio chairman of the Board of Trustees of the newly-established NJ TRANSIT Corporation.*

New Jersey Department of Transportation

1986 Annual Report

Celebrating 20 Years as a Transportation Department

1986: Governor Thomas H. Kean and Commissioner Hazel Frank Gluck meet with (standing) Deputy Commissioner Michael F. Barrett and Assistant Commissioners Jack Freidenrich, (seated left) James A. Crawford, (seated right) Roger E. Nutt.



1966: Commissioner David J. Goldberg (front row, second left) poses with the top managers of the first Transportation Department: (front row) Ronald Berman, Russell Mullen, Joseph Cunningham, (back row) James Schuyler, Ben Palumbo, Keith Rosser, Bernard McGlone and Jack Freidenrich.



HAZEL FRANK GLUCK
COMMISSIONER

STATE OF NEW JERSEY
DEPARTMENT OF TRANSPORTATION

1035 PARKWAY AVENUE
CN 600
TRENTON, N.J. 08625
609-530-3535

March 1987

Dear Governor Kean:

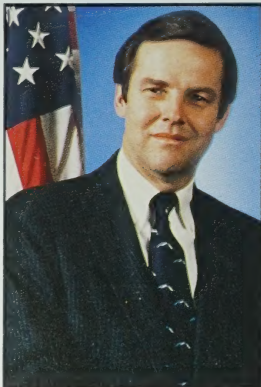
I am pleased to present the 1986 Annual Report of the New Jersey Department of Transportation.

The year 1986 marked the 20th anniversary of the implementation of the Transportation Act of 1966, which laid the groundwork for the creation of the New Jersey Department of Transportation. This anniversary was an historic milestone in a year that was filled with many other significant events.

This annual report recounts the events of 1986 in light of the Department's 20-year history - from the opening of I-78 through Union County with unique environmental safeguards; to the start of construction on the I-287 connection with the New York Thruway; to the opening of 2.6 miles of Route 55 in Gloucester County and the elimination of outmoded traffic circles throughout the state.

Looking to the future, the Department's immediate goals are the passage of the NJ TRANSPLAN legislation to address the problems of unplanned growth and renewal of the Transportation Trust Fund to continue the rebuilding of New Jersey's transportation system as one of the best in the nation.

I am personally committed to achieving these goals in 1987.



Thomas H. Kean
Governor



Hazel Frank Gluck
Commissioner

Sincerely yours,

Hazel Frank Gluck
Commissioner of Transportation

CONTENTS

Page

Engineering & Operations

4

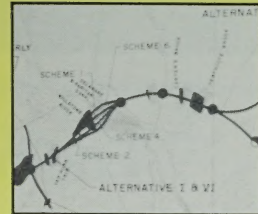
The design, building and maintenance of the entire transportation network



Transportation Services

12

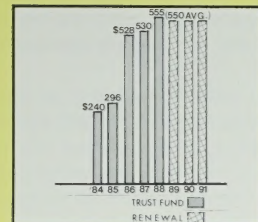
The planning, balancing and integration of all modes of transportation



Finance & Administration

17

The ways and means of getting the transportation job done



ARTICLE 1

This act shall be known and may be cited as the "Transportation Act of 1966." It shall be the purpose and intent of this act to establish the means whereby the full resources of the State can be used and applied in a coordinated and integrated matter (sic) to solve or assist in the solution of the problems of all modes of transportation; to promote an efficient, fully integrated and balanced transportation system for the State; to prepare and implement comprehensive plans and programs for all modes of transportation development in the State; and to coordinate the transportation activities of State agencies, State created public authorities, and other public agencies with transportation responsibilities within the State.

L. 1966, c. 301, & 1. Amended by L. 1972, c. 164, & 1.



NJDOT inspectors William Picatagi and Albert Balluch check a bridge support under construction on Route 1, Mercer County.

Engineering & Operations

The year 1986 was a banner one for the DOT, with more roads and bridges repaired and rebuilt and missing highway links completed than ever before. Contracts totalling \$600 million were in progress, generating thousands of construction-related jobs and stimulating economic growth in New Jersey.

The statewide effort to revitalize one of New Jersey's greatest assets, its \$42 billion transportation network, continued throughout the year. Hardly a municipality in the state was without signs of highway and bridge improvements in progress or ready to come off the drawing board.

From the completion of I-78 in Union County to the advances in closing a missing link on the Route 55 freeway in Gloucester County, progress in rehabilitating and expanding a well-maintained, effective transportation system was evident.

New Highways

Major construction in 1986 included the completion of the I-78 missing link in Union County, the opening of another 2.6-mile stretch of the Route 55 freeway in Gloucester County, groundbreaking to extend I-287 from Montville to the New York State line in Bergen, Morris and Passaic Counties and additional work on the Trenton Complex (Routes I-195 and I-295) in Mercer and Burlington Counties.

A new three-mile section of the **Route 55** freeway opened in January, extending from north of Tylers Mill Road to south of Bank Bridge Road in Mantua, Washington and Deptford Townships. Work on this \$18.6-million project included grading, paving and structures.

The new Route 55 freeway bridges over Still Run in Franklin Township and Chestnut Branch in Mantua were completed in October and a 14.3-mile section of the freeway from south of Route 40 to north of Tylers Mill Road in Franklin, Elk, Harrison, Mantua, Clayton and Glassboro began in the spring. This \$69.9-million project includes construction of 12 bridges. Two other freeway contracts are to be advertised in 1987.

When work on these contracts is completed, the freeway will be 40 miles long and will encourage the economic development of southern New Jersey.

Construction on the first two of approximately 14 contracts to complete the final 19.1 miles of **I-287** began this summer. The first contract extends just over two miles from south of Route 23 to the Pequannock River and from Riverdale Road to Cotliss Road in Riverdale, Morris County. The contract includes grading, paving and drainage, a bridge carrying Route 23 over I-287 and interchanges at Route 23 and the Paterson-Hamburg Turnpike.

The second contract runs from north of the Pequannock River to south of the Ramapo River through Bloomingdale, Oakland, Pompton Lakes and Wanaque in Bergen and Passaic Counties.

The \$400 million extension is expected to be completed in 1992 and will ease local congestion and speed regional travel.

Work continued on **I-195** and **I-295** (part of the Trenton Complex) in Hamilton and Bordentown Townships, Mercer and Burlington Counties.

Three contracts to complete the 4.7-mile missing link of **I-78** in Warren County moved ahead this year. The \$60-million segment will connect I-78 from Still Valley to a new Delaware River bridge to Pennsylvania. The project is expected to be completed in 1989.

Traffic Circles

The first traffic circle in the nation debuted in Cherry Hill, Camden County, in 1929, an engineering breakthrough for traffic control that became commonplace throughout New Jersey. As automobile use increased after World War II, however, most of the circles became clogged and some became hazardous due to high traffic volumes undreamed of by early highway engineers.

The Department has embarked on the redesign and reconstruction or elimination of several of the traffic circles with the most serious safety problems.

Ribbon-cutting ceremonies were held in June following completion of a project to eliminate the Route 35 Eatontown Circle in Monmouth County. The \$5.8-million project, which was completed six months ahead of schedule, included replacement of the existing traffic circle with a signalized intersection and ramps, a jughandle and the addition of a third lane on Route 36. The project was funded 100 percent by the Transportation Trust Fund.

In Morris County, the Route 23 Riverdale Circle was eliminated in September and elimination of the Route 23 Jackson Circle is under way. A \$1.6-million project to eliminate the Lodi Circle in Bergen County and the \$7.2-million cut-through of the Laurelton Circle in Brick Township, Ocean County, will be completed by the end of 1987.

OTHER HIGHLIGHTS

Metropark Ramps - Ceremonies were held in November to open the new Metropark ramps to the Garden State Parkway at Wood Avenue in Woodbridge Township, Middlesex County. The \$4.4-million project near the Middlesex-Essex Turnpike will provide better access to Metropark, a

DOT DATA

AIRPORTS:	Public use	64
	Restricted	31
	Heliports/Helistops	420

BRIDGES:	State-maintained	2,419
	Draw	37
	Canal/Feeder	51
	To Rehabilitate or Replace	\$300,000 - \$50 million each

ROADS:

NJDOT maintains 2,316 miles (10,510 lane miles)

Average Cost Per Mile:

To Resurface	\$600,000 - \$1.5 million
To Reconstruct	\$1 - \$10 million
To Improve Capacity	\$3 million

FENCES:

Chain link, road:	2,627,478'
Chain link, bridge:	53,433'
Snow:	371,175'

GUIDERAILS:

Steel	5,423,407'
Cable	103,512'

MOWING:	10,727 acres
----------------	--------------

SHRUB BEDS:	743,804 square yards
--------------------	----------------------

SIGNS:	137,973
---------------	---------

SNOW AND ICE REMOVAL:

1,200 maintenance employees plus trained volunteers from other units as truck & equipment operators worked two 12-hour shifts during storms in 1985-86 to clear 25" at \$10.4 million.

SNOW VEHICLES:	NJDOT 687 (by contract 900)
-----------------------	--------------------------------

TRAFFIC SIGNALS:	NJDOT maintains 2,180
-------------------------	-----------------------

transportation hub where rail, bus and roadways meet.

Route 24 - The Department received one of the final permits needed to allow construction of Route 24 in Morris County. Construction is already under way on three bridges needed for the new highway.

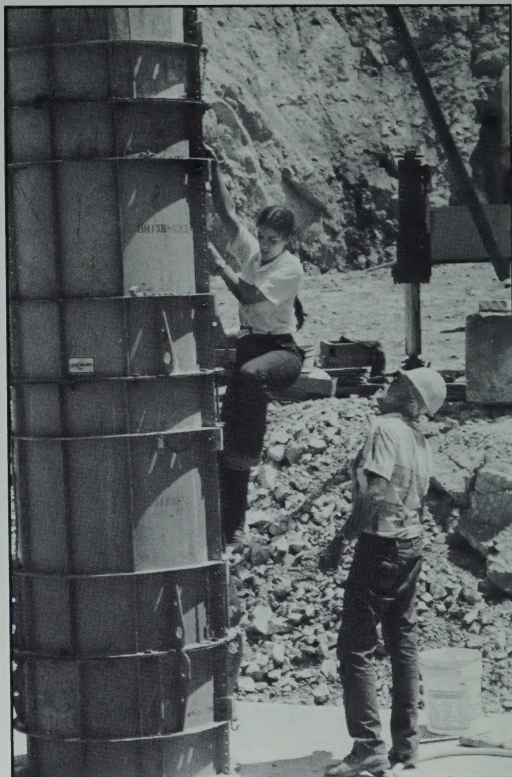
I-80 - The Department continued its extensive \$128-million program this spring to rehabilitate more than 100 bridges on I-80 between the Delaware Water Gap and the George Washington Bridge. Rehabilitation was completed this fall on three bridges in Morris County and 10 others in Passaic County. Work on the westbound bridges will begin in spring 1987. Another project to rehabilitate 14 bridges in Morris and Sussex Counties will be completed in late 1987.

I-287 - A \$15.4-million, six-bridge rehabilitation project on I-287 in Somerset and Middlesex Counties was completed in October.

Route 38 - The Department received bids in November for dualization of 3.6 miles of Route 38 between Creek Road and Route 530 in Hainesport, Lumberton and Mount Holly, Burlington County.

Route 152 - Groundbreaking ceremonies were held in April for the Route 152 road and bridge improvements in Somers Point and Egg Harbor, Atlantic County. The \$46-million project includes complete reconstruction of Route 152 from Bay Avenue to the western end of the John F. Kennedy Bridge over Beach Thorofare. When completed, the 3.2-mile road will consist of two 12-foot travel lanes with 12-foot shoulders. A new high-level fixed bridge will replace the existing drawbridge over Broad Thorofare.

Route 495 - The heavily-travelled Route 495 North Bergen Viaduct which provides access to the Lincoln Tunnel had to be partially closed during several weekends this fall for emergency repairs. Although only one direction was closed each weekend, a major bi-state public information effort was launched to alert motorists. The \$8.4-million project included replacing deck slabs on the priority bus lane, reconstruction of underlying steel girders and columns near the median to provide



The NJDOT bridge engineer on the contract for the final link-up of I-78 with Pennsylvania, Lynn Bartleson, descends a column after inspecting it.

independent support for the priority bus lane on the bridge, strengthening of several crossbeams, repair of worn bearings and minor widening.

Resurfacing - The Department resurfaced more than 200 lane miles of roadway using 142,000 tons of bituminous material. Thanks to the Transportation Trust Fund, this is the third year NJDOT has been able to undertake an ambitious fall resurfacing program to rehabilitate deteriorating pavement on the state system.

Era of the Environment 1966-86

The past 20 years have been marked by an increasing awareness among the American people and the US Congress of the need to protect the nation's natural resources. The year 1966 saw the passage of the National Historic Preservation Act and Section 4(f) of the US Department of Transportation Act which requires the protection of parkland, recreation areas, historical sites and waterfowl and wildlife refuges. Both of these laws and the national Environmental Policy Act of 1969 had a profound effect on the location and design of the nation's highways.

The Department responded by establishing the Division of Economic and Environmental Analysis, now called the Division of Project Development, in its 1971 reorganization. Today the Division's mission is to determine feasible highway locations and prepare official environmental studies, reports and documents for NJDOT projects.

This year, the Department won the USDOT's Historic Preservation Award for "sensitive treatment of the 2,000-acre Abbott Farm, a National Historic Landmark and one of the largest and most important prehistoric archeological sites in the Eastern United States." The work was done in conjunction with the Trenton Complex.

The environmental challenge continues. The list of federal and state environmental

requirements has grown to more than 30 different regulations and laws which often complicate the Department's primary mission of building and maintaining an effective transportation network.

Sometimes the mandate to protect the environment and the need to provide adequate transportation has resulted in controversies which have ended in legal challenges to the Department's projects. Because of extensive environmental and engineering studies and documentation -- and a motivated community involvement process -- the Department has generally prevailed in court.

Significantly, in August of this year, Governor Thomas H. Kean and other state, local and Department officials opened the 5.5-mile "missing link" of Interstate 78 in Union County. The new \$111-million, six-lane highway connects the 18.8-mile piece from Springfield east to New York (Holland Tunnel) and the 38.3-mile section from Berkeley Heights west to Still Valley, near the Pennsylvania border where the last segment of the interstate in New Jersey is under construction.

The sections of I-78 immediately west and east of the new link were in place by the late 1970s. While it took only four years to build the new section, it had been the subject of environmental studies, public hearings and legal action since 1972. As a result of these processes, this stretch of highway



NJDOT artist Frank Bridgewater's illustration for the I-78 ribbon-cutting program depicted the harmonious relationship between the interstate and its environment.

includes more environmental safeguards than any other road construction project ever undertaken in New Jersey.

The Watchung Reservation, a 2,000-acre county park that shelters wetlands and wildlife, was the center of the controversy. The final design of the road did much to lessen the impact of traffic and construction on the parkland. Miles of naturally tinted sound barriers were put up, rocks in wire baskets form retaining walls, and overpasses across the highway provide landscaped crossings for wildlife, equestrians and hikers.

The Watchung Reservation's four overpasses are unusual. In two cases, the highway passes beneath a park road and bridle paths. A third overpass is shared by motorists and equestrians. The fourth is 200 feet wide, sodded and planted with bushes and trees to encourage safe passage for animals across the highway.

The project also included the replacement of the horse stables, which are a major attraction in the Reservation.

OTHER 1986 HIGHLIGHTS

The Department obtained environmental clearances for several key transportation projects in 1986.

Route 38 Widening - Final environmental clearance for two sections in Burlington County was obtained. Seven miles are thus targeted for widening to accommodate growth in the area. One section, from East Creek Road to County Route 530, will be under construction in early 1987, while the other section, from the New Jersey Turnpike to Rancocas Creek, has advanced to final design and right-of-way acquisition stages. The latter section is to be advertised for construction by the end of 1987.

Route 55 - A Wetlands Mitigation Plan, which was a condition of the Army Corps of Engineers permit, allowed construction to continue on schedule.

I-78, Still Valley - The archeological salvage operations at two sites within the project corridor were completed and construction began on schedule from the intersection with Routes 22 and 173 in Still Valley, Warren County, to the Delaware River bridge currently under construction.

I-80 Additional Lanes - The Environmental Assessment was completed and a *Finding of No Significant Impact* was issued for this project in March. This allowed the DOT to continue engineering design plans for construction of one additional lane in each direction within the center median from Route 15 to Route 287 in Morris County.

Route 92 - The Draft Environmental Impact Statement for this 13-mile link between Route 206 north of Princeton and Route 33 east of Hightstown in Mercer, Middlesex, and Somerset Counties was approved by the Federal Highway



Wildflowers

This spring Department crews sowed 40 acres of wildflower seeds statewide. Despite the lack of rainfall, these efforts yielded displays of black-eyed Susans and blue cornflowers, two of the showier varieties. Another 80 acres were seeded in the fall.

Road construction removes the seeds that have been sown by nature for generations. The reseeding gets the natural cycle going again. There are also practical benefits: with central areas in wildflowers, the mowing areas along the highways can be reduced. The added color also provides visual interest which keeps drivers more alert. Each year, these wildflowers will reseed themselves over larger and larger areas. The program is not just for rural stretches - nine different areas along Routes 1/9 in Elizabeth and I-78 in Newark were also seeded, along with the Route 46 service road in the vicinity of the Willowbrook Mall in Wayne.

Administration (FHWA) in October. Public hearings were held in December, the first and biggest step in making a final decision on the selection of a preferred alternative.

I-95 Ramps - In September 1986, the Environmental Assessment for the I-95 Ramps in Ridgefield Park, Bergen County, was approved by the FHWA. This project is being processed by the Department on behalf of Ridgefield Park. By receiving this approval, the Department was able to circulate the document for public review in October, four months ahead of schedule.

Route 152 - Reconstruction of 3.2 miles of this Atlantic County roadway, including replacement of nine deteriorated bridges, began in 1986. The Army Corps of Engineers and New Jersey Department of Environmental Protection (NJDEP) approved the final wetlands mitigation plan, authorizing permits needed from those agencies which allowed construction to continue as scheduled.

The required Coast Guard permit was also

obtained to allow construction to begin on the bridges in the project.

Route 206 - In response to comments on the Draft Environmental Impact Statement, the Department obtained FHWA permission to advance the design of the Somerville Circle portion of the project. This will allow the construction phase of the badly needed Somerville Circle improvement to begin shortly after approval of the Final Environmental Impact Statement.

I-287 - In March 1986, an Army Corps of Engineers permit was received for the 5.6-mile portion of the project between Route 23 and Route 208, allowing construction to begin on this section of the project. In June a favorable decision was received from the US Court of Appeals in the litigation by the project's opponents challenging the approval of the Environmental Impact Statement for the entire 20.6-mile interstate project in Morris, Passaic and Bergen Counties. Following this favorable decision, contracts were advertised to begin the completion of the last gap in the 87-mile circumferential interstate route.

I-195/295 (Trenton Complex) - The following permits were issued for the Trenton Complex: NJDEP - Waterfront Development /Wetlands permit, January; US Army Corps of Engineers permit, May; Delaware River Basin Commission permit, July. These permits allow final design to proceed on the remaining sections of I-195/295 and Routes 129/29. These sections, together with the I-195/295 segments under construction, will complete the interstate highway system in and around the Trenton area.

County Route 522 - On behalf of Middlesex County and South Brunswick Township, the Department prepared an Environmental Impact Statement (EIS) for the four-mile, four-lane roadway

between Route 1 and Route 130. In June, NJDOT received FHWA approval of the County Route 522 Final EIS, making it possible to proceed with the right of way acquisition and development of final design for the project.

Eisenhower Parkway - Triborough Road - During 1986, the Draft EIS was prepared for the Eisenhower Parkway/Triborough Road project sponsored by Essex and Morris Counties. This will permit a public hearing to be held early in 1987 on advancement to the final engineering stage of a planned 4.5-mile extension to the existing roadway.

Somerset Expressway - The Draft EIS for the proposed 9.5 miles of new highway between Route 206 and I-287 in Somerset County was completed and submitted to FHWA for review, the result of two years of environmental and engineering studies. It is a major step in advancement of this project.

Hudson River Waterfront - The Environmental Sensitivity Study and the Preliminary Hazardous Waste Assessment were completed this year, allowing the feasibility study to be completed and the selection of the alternatives to be advanced to detailed study.

Route 1, North Brunswick - NJDOT obtained FHWA approval for processing this as two independent projects with separate environmental documents, thereby saving months of processing time.

Route 147 - The Department received FHWA approval of the Final Environmental Impact Statement in November for widening and bridge replacements on 4.3 miles of Route 147 in Cape May County. This approval will permit the project to advance to the final design and right of way acquisition phases.



Work continues on Route 23 in Pequannock, Morris County

1960s

1966: December 12, Highway Department becomes NJDOT.

David J. Goldberg,
Commissioner

NJDOT

Milestones

1966 - 1986

1970s

1970: John C. Kohl,
Commissioner

1974: Alan Sagner,
Commissioner

1978: Louis J. Gambacini,
Commissioner

1974: Ridesharing program is established



New Jersey voters approve
\$475 million bond issue (1979).

TRANSPAC, the \$600 million,
largest transit capital improvement
program in New Jersey history is
created.

1980s

1981: Anne P. Canby,
Commissioner

1982: John P. Sheridan, Jr.,
Commissioner

1985: Roger A. Bodman,
Commissioner

1986: Hazel Frank Gluck,
Commissioner

New Jersey is first in US in
ridesharing (1980).

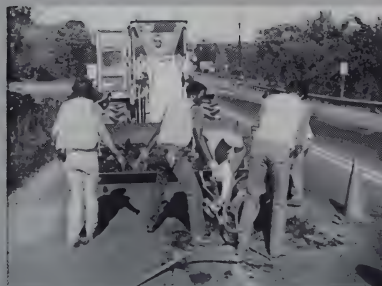
Vans purchased for employee
ridesharing.

New replacement vans purchased
for employee ridesharing (1986).

New Jersey voters approve
\$135 million Bridge Rehabilitation
and Improvement Bond Issue (1983).

New Jersey voters approve
dedication of 2 1/2¢ of existing
8¢ gas tax to transportation (1984).

102 construction contracts
awarded in Fiscal Year 1966-67
totaled \$123,362,750.77.



New record is set for obligating
federal funds available to New Jersey
for highway projects. \$339.5 million,
the full amount, authorized (1983).

\$600 million in contracts awarded;
largest construction program in
New Jersey history (1985).

Construction and Compliance Practices Bureau was organized to coordinate road and bridge construction statewide.

Transportation systems management (TSM), quick, low cost, spot improvements to transportation network is adopted.

Through automation, a resident engineer can now input data daily and produce reports and estimates as necessary.

Traffic signal controllers are mechanically operated.

Traffic controllers are electronic with remote control to adjust timing.

First capital assistance is offered to railroads.



The Department oversaw the manufacture and purchase of 230 commuter rail cars and electrical and diesel locomotives.

The 67-mile Morris and Essex Line re-electrification project completed under DOT supervision (1984).

Rail station renovations took place.

First financial assistance is awarded for buses.



First buses ordered and inspected in statewide bus capital program (1973).

Elderly and handicapped vehicles specified, bid and inspected.

Airport Safety Act is enacted (1984).



National Historic Preservation Act and Section 4(f) of USDOT Act is enacted (1966).

Clean Air Act is passed.

New Jersey received USDOT Historic Preservation Award for Abbott Farm (Trenton Complex) in 1986.

Division of Economic and Environmental Analysis is established (1971).

National Environmental Policy Act is enacted (1969).

The Future

Hudson Waterfront Development Plan is adopted (1985).

NJ TRANSPLAN

Transportation Services

NJ TRANSPAN

The Department undertook a major legislative initiative this year in an effort to provide a framework for resolving through planning and management the pressures brought to bear on the transportation network by New Jersey's economic growth.

Called New Jersey TRANSPAN, the three-bill legislative package would allow the state, counties and municipalities to become partners in the planning process; preserve the arterial functions of state roadways to provide safe, rapid and efficient movement of people and goods; and provide a mechanism through which both public and private sectors would cooperate on funding transportation improvements for which normal resources and reasonable time frames are not adequate.

Specifically, New Jersey TRANSPAN calls for amendments to the Municipal-County Planning Partnership Act to strengthen the county role in planning development with regional impact while protecting existing municipal planning powers. The proposed amendments would require county master plans that address specific land use and planning concerns and mandate county review of proposals for large developments fronting county or state routes.

The second bill, the State Highway Access Management Act, would set standards for spacing and design of access to state roadways with which municipal development permits must comply and encourage counties and municipalities to adopt similar access codes for roads under their jurisdiction. Enactment of this legislation would help the Department to control the proliferation of access points onto state highways which, in recent years, has contributed to serious traffic congestion statewide.

At this printing, the three bills were under legislative review.

At left: Route 73 through Burlington and Camden Counties is one of the growth corridors under study by the Department.



The New Jersey Transportation Plan 1968-1986

A 1979 amendment to the Transportation Act of 1966, which created the New Jersey Department of Transportation, required that the state transportation plan be updated or revised at least every five years. Although numerous draft documents have been developed over the past two decades, only three "official" statewide master plans or transportation plans have been published by the Department -- in 1968, in 1972 and in 1984. A perusal of each of the three official documents provides a snapshot view of how the Department's focus has changed to provide transportation services to the state's traveling public.

1968

The *1968 Master Plan for Transportation* was the first statewide planning document developed by the Department as a multi-modal agency providing transportation services statewide. This first master plan examined a host of perplexing problems that made the provision of a high level of transportation service difficult -- problems of annual financing, the "pains of prosperity" (more people affording more cars), and the pressures of "urbanization."

To meet the transportation needs of the state in the context of these problems, the 1968 plan proposed a \$2.75-billion, 20-year program of state highway, non-interstate improvements, broken out into first and second priority categories (\$1.5 billion for the first 10 years). New freeway construction was seen as the panacea for many of the state's transportation ills. In fact, \$2.25 billion (80%) of the proposed \$2.75 billion program was targeted for construction of 720 miles of new freeways, with the remainder allocated to improve existing facilities. This new freeway construction program was an ambitious approach. Improvements to the state's commuter rail system (still at that time under private control) totaled \$208 million.

As a result of this plan, Governor Richard Hughes appointed a blue-ribbon commission which set the groundwork for the ultimately successful \$640 million 1968 Bond Issue (\$440 million highway, \$220 million public transit). The bond

monies, however, provided only half the dollars needed. Furthermore, the highway dollars could not be used to match federal funds

1972

The 1972 master plan was even more financially ambitious and more multi-modally oriented. A 20-year program suggested allocation of \$4.3 billion for highways, \$1.9 billion for rail passenger service, nearly \$300 million for improved bus service and almost \$50 million for airport development. Non-interstate freeway construction accounted for \$1.9 billion of the proposed \$4.3-billion highway program, providing for 568 miles of new freeways. In addition, \$1.5 billion was recommended to improve the existing state highway system.

Unstable funding sources made these plans falter. In 1979, a \$475 million bond issue was successful. With such limited funding, NJDOT scrambled to take care of only its most critical priorities.

1984

Much happened over the decade that transpired between the 1972 and 1984 transportation plans. Even the title of the document changed, with the overarching concept of "master planning" replaced by the more specific "transportation planning." The uncertainties surrounding gasoline supplies, financial resources, the state's economy in general, federal support, and state development made 20-year master planning an impractical activity.

Armed with the four-year funding program of the New Jersey Transportation Trust Fund Authority, the 1984 Transportation Plan recommended a four-year short-range plan of achievable projects. Of the total \$3.3 billion proposed program, \$2.3 billion was allocated for highway improvements and \$1 billion for public transit improvements. The desirability of new construction lessened while the importance of improving and upgrading the state's existing highway and public transit system increased.

CORRIDOR STUDIES

In an effort to define future transportation projects statewide, the Department commissioned five corridor studies along older existing and badly congested roadways and along new high-growth corridors. The studies are expected not only to anticipate and recommend solutions to the traffic problems which accompany rapid growth, but also to suggest possible funding sources for needed improvements, given the limited government resources available for such projects. The studies cover:

- **Route 73** from Route 130 in Burlington County to Route 30 in Camden County, including Route 38 from Route 73 to I-295 and Route 70 from Route 73 to County Route 541;

- **Routes 46/3** from New Road in Morris County to the Garden State Parkway in Passaic County and Route 3 in Passaic County from Route



Hudson River Waterfront

Commissioner Hazel Frank Gluck, Governor Thomas H. Kean and Urban Mass Transportation Administration (UMTA) Chief Ralph L. Stanley pose with a "check" representing the \$20 million grant NJ TRANSIT received from UMTA for acquisition of right of way on the Hudson River Waterfront which will be needed for the planned light rail and busway system there.

Stanley called the project an outstanding example of public-private partnership which demonstrated the DOT's "farsightedness in planning major new public transportation improvements to facilitate waterfront redevelopment."

The grant will finance acquisition of Conrail property and relocation of Conrail's current freight operations on the Waterfront to Conrail's Northern Branch.

The planned 15-mile long "waterfront transitway" will include a four-mile long busway, a five-mile long light rail segment and a six-mile long stretch for shared use by buses and light rail.

46 to the Garden State Parkway;

- **Route 130** from Route 206 in Burlington County to Route 1 in Middlesex County;
- **Routes 40/322** in Atlantic County; and
- **I-78** from the Delaware River in Warren County to Route 24 in Essex County.

Specific areas which will be addressed by each study include development forecasts of magnitude, kind and pattern of probable development; transportation improvement alternatives on state, county and municipal roads and in public transit; and cost analyses of these alternatives and financing plans. Municipal and county participation throughout the course of the studies will be assured.

A similar study is under way in Camden, Gloucester, Salem, Cumberland, Atlantic and Cape May Counties. This *South Jersey Highway Improvement Study* adopts a regional approach to the future highway travel needs of South Jersey and the development and traffic pressures related to casino and shore development.

A collection of highway improvements has been targeted for further evaluation. During the course of the study, a technical advisory committee comprised of representatives of county and state government, metropolitan planning organizations, authorities and developers have been reviewing study findings.

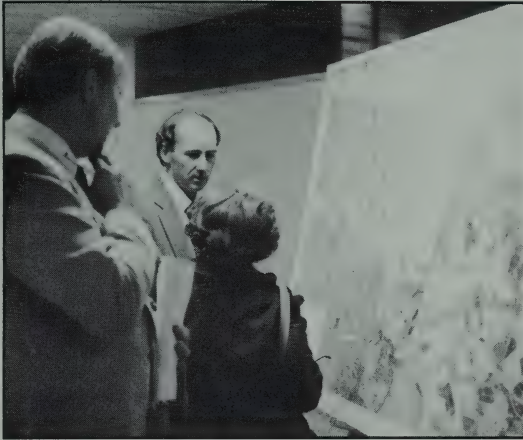
In the coming year, the study will focus on highway improvement alternatives and on the economic and financial segments of the project.

AERONAUTICS

NJDOT's Aeronautics Division is responsible for the promotion of aviation through airport development and aviation safety. New projects undertaken this year include heliport installation requirements for the second Federal Aviation Administration Microwave Landing System and promotion of pilot judgment training in flight instruction curricula.

In administering the Airport Safety Aid grant program, the Department has been developing a five-year airport construction schedule which includes phased inspection; implementing the pavement management system; updating the State Aviation System Plan (SASP); and automating the SASP and small airport master planning model.

At the close of 1986, the third year of providing airport improvement grants, nearly \$13.5 million in federal aviation trust fund money had been drawn down for New Jersey airports. Another \$625,000 in state grants went to airports ineligible for federal funding. The grants funded a variety of projects including runway and taxiway overlays, ramp expansions and visual guidance equipment. An



NJDOT planner Richard Crum answers a citizen's question at the public meeting on Route 92 alternatives in the Princeton area.

additional \$1.7 million in state aid construction and planning projects has been targeted.

To further expand the use of New Jersey airports, the Department has identified and set priorities for those facilities which would benefit from the installation of Loran-C approaches, independent navigation systems which do not require on-site ground equipment.

The Department also enforced the Airport Hazard Zoning Act this year. The Act requires municipalities to include appropriate land use planning through compatible zoning in the vicinity of aviation facilities. Several communities have adopted airport hazard zoning ordinances.

The Department conducted more than 900 safety inspections at both public and private airports/heliports and issued more than 800 certificates for temporary and permanent licenses. NJDOT personnel also participated in 45 accident investigations during 1986.

The Department's aviation advocacy role continued through presentation of safety seminars, education clinics and exhibitions, development of a model aviation curriculum in New Jersey and participation in Civil Air Patrol activities. A special newsletter, *New Jersey Aviation*, will keep municipalities and pilots abreast of current aviation issues. It is the latest addition to the Aeronautics publications list which also includes accident notification procedures and the airport directory. A new aeronautical chart is in process.

FREIGHT SERVICES

Conrail: The dilemma surrounding the return of the ownership of Conrail to the private sector was finally solved as one of the last actions of the 99th Congress. As a result of the Conrail

Privatization Act, Conrail paid the US government \$200 million in November. Six investment firms have been named to broker the sale of the government's Conrail stock holdings, a sale expected to net additional revenues of up to \$1.7 billion. Because the Conrail Privatization Act deals primarily with provisions of the Conrail ownership sale, NJDOT supported it as a rail freight policy that was in the best interest of New Jersey.

Shortline Railroads: The route mileage of New Jersey shortline railroads has increased 79 percent since 1984, growing from 124 miles operated in 1984 to 222 miles operated in 1986. This transition has preserved rail services for well over 50 major New Jersey industries which would have otherwise been negatively impacted.

Many of the shortline railroads require extensive rehabilitation. New Jersey's Rail Assistance Program has done much to meet this need and has been especially important in light of the federal government's reduction in funding for the Local Rail Service Assistance Program (LRSA) administered by the USDOT Federal Railroad Administration.

Local Rail: During 1986, the New Jersey Rail Assistance Program included \$5 million in state funds, \$1.1 million in federal funds and \$3.7 million in matching funds from the private sector.

The automotive, chemical, plastics and petroleum industries in New Jersey are dependent on rail service. These industries annually receive and ship 17.5 million tons (570,000 carloads) of raw material and finished products by rail. It is estimated that these carloads would translate into 1.4 million truck trips which in turn would require significant additional maintenance expenditures on our roadway system.

In addition to Conrail, the state is served by nine shortline railroads. Four of these were created to serve abandoned rail lines. Operation of these shortlines has accounted directly for preservation of 4,500 jobs statewide.

This year, 48 miles of track in Cumberland County were acquired by the Winchester and Western Railroad in order to continue local rail freight services to 25 major industries offering almost 350 jobs. Operation began on these lines in October. Approximately \$4 million will be provided by state and federal programs to fund a three-year rehabilitation program.

Motor Carriers: In conjunction with the New Jersey Division of Motor Vehicles, NJDOT has been participating in an initiative sponsored by the National Governor's Association (NGA) to create uniform registration, fuel tax and vehicle licensing procedures. The working group created to pursue this initiative has completed its recommendations, and states are now being requested to implement these standards to create nationwide uniformity.

Governor Kean has given the Department the lead for implementing these recommendations which include:

- establishing a State Motor Carrier Advisory Committee;
- becoming a member of the International Registration Plan;
- adopting the Uniform Fuel Tax Reporting Form;
- following the "six point plan" for fuel use tax reporting;
- joining the Base State Agreement for fuel use tax reporting;
- establishing multi-state trip permits;
- eliminating retaliatory taxes;
- establishing "one-stop" operation.

Uniform Motor Carrier Equipment Standards: This year the Department also worked with several state agencies to bring regulations on motor carrier safety into compliance with federal requirements.

In addition, the New Jersey State Police published proposed regulations to permit enforcement of vehicle equipment standards which mirror those adopted by USDOT. The regulations would apply to all interstate and hazardous materials motor carriers while intrastate motor carriers would be governed by existing regulations, somewhat different from the federal standards.

Hazardous Materials Transportation: The Department is ending its third year of activity in regulating the transportation of hazardous materials. The DOT has satisfied its legislative mandate and is nearing full implementation of an enforcement program. Truck and rail shipments will be regulated by NJDOT to insure compliance with standards adopted to guarantee the safe transportation of hazardous materials.

The State of New Jersey has been the recipient of three consecutive development grants of \$50,000 each under the Motor Carrier Safety Assistance Program (MCSAP) to develop the current regulatory and enforcement standards. NJDOT has received preliminary approval for a \$1.2-million federal implementation grant to cover actual regulatory and enforcement activities.

NASHTO

The Department hosted the 62nd Annual Conference of NASHTO, the Northeast Association

of State Highway and Transportation Officials, in Atlantic City in April. The event drew more than 500 transportation officials from the Northeast to its 12 technical seminars on topics such as litigation, new technologies, hazardous waste transport and public relations. The event included tours of the PATCO high speed line and the federal aviation facility in Pomona.

TRANSCOM

Assistant Commissioner Jack Freidenrich joined the chief executives of the New Jersey /New York area's leading transportation agencies in signing the agreement which formally established TRANSCOM (the Transportation Operations Coordinating Committee) in its new Jersey City center in November.

TRANSCOM is envisioned as a high-tech traffic center which can alert transportation officials in the region to tie-ups and, through high-tech electronics and computers, analyze the safest, most efficient alternatives for travelers and emergency operations.

TRANSCOM is a unique coalition of transportation and traffic control agencies, the first nationwide consortium of its kind in the nation. The Federal Highway Administration contributed a \$314,000 grant to the new agency after the Port Authority of New York and New Jersey started the project with \$800,000 in seed money. NJDOT's contribution was \$213,000 for Fiscal Year 1987.

REORGANIZATION

The Division of Transportation Services and Planning was reorganized this year through definition of three deputy assistant commissioner positions covering Planning and Research, Modal Services and Regulations and Policy.

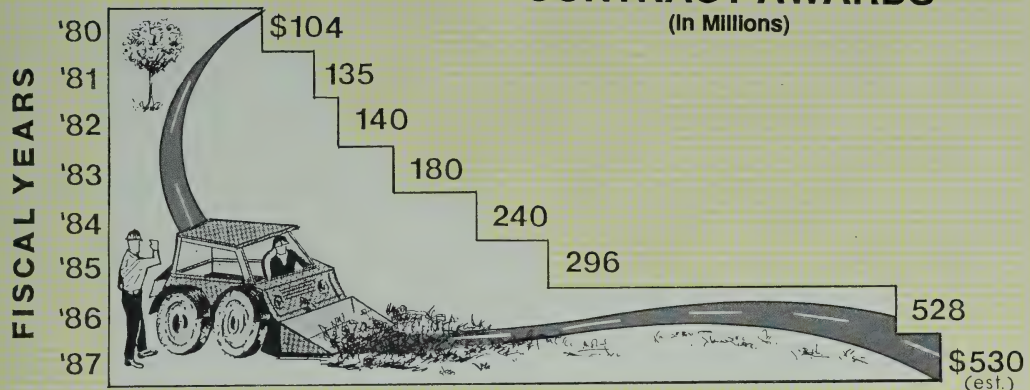
Modal Services includes the offices of Highway Services, Aeronautics, Public Transit, Freight, and Innovative Transportation Services, including Waterborne Transportation.

The Regulations and Policy Unit is composed of the offices of Regulatory Affairs, Policy Analysis, Community Involvement and Governmental Liaison, Civil Rights and Investigative and Security Services.

The composition of Planning and Research remains as it was prior to the reorganization.

NJDOT CONSTRUCTION CONTRACT AWARDS

(In Millions)



Finance and Administration

In the spring of the year, the Department presented its Fiscal Year 1987 construction program to the Senate and Assembly Appropriations Committees. It was the most extensive capital program ever proposed by the Department.

The \$697.76 million program was subsequently approved by both houses in the Legislature and signed by Governor Kean. With these approvals, the revenues available to the Department from the Transportation Trust Fund were fully committed -- a full year ahead of schedule.

The ability of the Department to deliver vital transportation programs more quickly than anticipated is an outstanding accomplishment. It exceeds any prior delivery of projects in the history of the Department. However, as a result of expediting the program, financing for the Fiscal Year 1988 construction program was left in question.

It became clear that in order to continue to provide funding for future construction programs, the Trust Fund had to be renewed. At the time funding was running out, demands for transportation improvements were increasing. Added to the continuing backlogged need caused by inadequate funding in previous decades were the new transportation needs created by New Jersey's unprecedented economic boom.

As a result, Commissioner Gluck, with the Governor's approval, began a series of meetings

with local officials throughout the state to stress the need to renew the Trust Fund and to ask for their support with their local legislators.

As a result of that campaign, more than one hundred resolutions supporting a renewal of the Trust Fund had been received by the Department by December 31. Newspapers throughout the state also supported, through editorials, the Commissioner's renewal efforts.

The question of how to fund the renewal was also addressed by Commissioner Gluck. After a thorough review of a variety of funding mechanisms, the Commissioner espoused a five-cent increase in the motor fuels tax, dedicated to the Trust Fund Authority, citing the user-fee concept as a reasonable method of funding the program. Currently, only two and one-half cents of the motor fuels tax is dedicated to transportation.

The renewal proposed by the Department and Commissioner Gluck would be a four-year, \$3.9-billion program. It would differ from the original Trust Fund in that it would double the funding to NJ TRANSIT, more than double the municipal aid (from \$19 to \$40 million annually), provide \$20 million annually for counties, and provide \$10 million each year for transportation planning.

As 1986 drew to a close, Commissioner Gluck continued her campaign to have a renewed Trust Fund in place before the beginning of the 1988 Fiscal Year.

FMIS COMPLETED

System design for the Department's Financial Management Information System (FMIS) was completed in 1986. The FMIS project, a joint venture between Department staff, Office of Telecommunications and Information Systems (OTIS) and a professional consulting firm, will be installed in Fiscal Year 1987 under the direction of OTIS. Once the system is fully installed and operational in Fiscal Year 1988, both accounting and non-accounting employees will benefit from its development. The new system includes applications for general accounting, capital accounting, accounts payable; consultant, utility and rail contract management; job accounting; and federal tracking and control. It will provide all Department managers with accurate and timely information for daily activities. FMIS will eliminate the need to maintain the several independent information systems that now exist.

PMIS BEGINS

In April 1986 NJDOT's Deputy Director of Personnel was named as one of a six-member Task Force established by the Department of Personnel to work with consultants on the development of a Personnel Management Information System (PMIS). The aim of the system is to replace the present manual processing of personnel actions, which takes four to six weeks for turnaround, with a computerized system, which would enable personnel actions to be processed more efficiently.

The Department of Transportation processes some 6,000 personnel actions each year. Once PMIS is fully operational it is expected to enhance the efficiency of personnel operations in all of the state departments. The Department has been selected, along with the Departments of Personnel and Health, to participate in a parallel pilot project involving processing the same actions manually and electronically to insure that the system performs as designed.

CIVIL SERVICE REFORM

The Civil Service Reform Bill which was signed into law in September marked the first major change in the management of state government in 78 years. As a result, the Department of Personnel took the place of the former Department of Civil Service. In addition, a new Senior Executive Service was created which may be composed of up to 1200 high level managers who can be moved from one state unit to another.

A new Merit System Board replaces the five-member Civil Service Commission. The board will review disciplinary cases and due process for employees.

The Department of Personnel will establish promotional qualifications but the legislation permits the Commissioner of Personnel to delegate the responsibility for classifying positions, administering examinations and other technical personnel functions while retaining review authority.

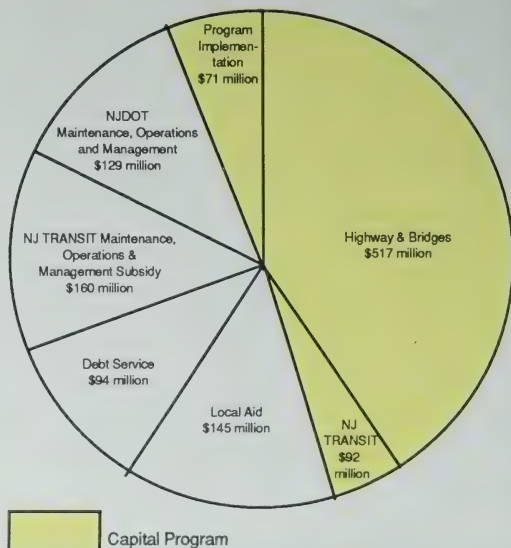
Despite the changes, the new law maintains the absolute veterans preference which allows veterans who pass an open competitive test to go to the head of the hiring list. It also preserves equal employment opportunity provisions in place at the time of the bill's enactment.

SUPPORT SPECIALIST PROGRAM

An innovative Support Specialist Program, designed to enhance upward mobility for those in support titles, primarily the Secretarial Assistant title series, got under way in 1986. The first group of 20 DOT employees enrolled have met with Department of Personnel trainers and consultant instructors one day a week for 22 weeks.

The program stresses a positive self-image, the individual's importance within the larger organization, leadership skills, management, government organization and professionalism. In addition, participants learn how to turn weaknesses into strengths, and gain experience in positive assertiveness and personal interaction, budgeting time and handling complaints.

New Jersey
Department of Transportation
Consolidated Expenditures,
Fiscal year 1986
\$1.208 billion



NEW BUILDINGS

In August the Department opened the doors of a new seven-story building to 1,100 employees who work in Engineering and Operations units. The 280,000-square-foot structure stands behind the DOT Headquarters on Parkway Avenue in Ewing and contains 1,250 individual work stations. The new facility allowed consolidation of offices which were previously housed at 14 different geographical locations.

The building utilizes a passive solar concept. The portions of the building which face south have strip windows to permit the sun to add additional warmth to the interior during winter months. Recessed windows and blinds will assist the air-conditioning during the summer.

The building also houses a new cafeteria. The old cafeteria will be converted into a hearing room and will provide a passageway between the old and new structures.

Also in 1986, the Department purchased the 25-acre Morton J. Thiokol facility adjacent to the

present headquarters site. The addition of these lands and buildings increases the size of the Department's headquarters complex to a total of 75 acres containing a half-million square feet of office space and 300,000 square feet of work shops and laboratories, and enough land to take care of any expansion needs for the foreseeable future.

The consolidation of the Department's regional offices, an early recommendation of the Governor's Management Improvement Program for increased efficiency, continued in 1986. Construction of the new Region III facility is under way with occupancy scheduled for June 1987. This facility will house the approximately 155 employees presently working in Howell, East Brunswick, Toms River and Metuchen offices, thereby consolidating all of Region III's office operations.

A new maintenance facility was constructed and occupied in Bridgewater. Contracts were also awarded for new consolidated maintenance facilities in Totowa and Riverdale. Construction is expected to be completed in 1987.



The new Engineering and Operations building at NJDOT Headquarters Complex in Ewing.



EMPLOYEES OF THE YEAR

The highest non-managerial achievers in the Department in 1985 were nominated by their supervisors to receive the first DOT Employee of the Year awards. The sixty-one employees selected received plaques this spring commemorating the honor. From this group, eleven were chosen "Departmental Employees of the Year."

According to the selection process, these employees "far exceeded" their job performance standards for the entire 1985 calendar year. In addition to this, they had to satisfy at least one of the following criteria: exceptional creativity, exceptional concern for safety, exceptional leadership skills, enhancement of the public image

of the Department, exceptional responsibility, and/or extreme devotion to duty.

In future years, nominations from fellow employees will be considered by supervisors as part of the process of choosing the nominees. (Names of the 61 winners are found on the inside back cover.)



1986 Employees of the Year

The photos on page 20 are arranged alphabetically. (First row) George Abrahams, Truck Driver, Netcong; Joseph Agabiti, Principal Engineering Aide, Ewing; Julia Allen, Supervisor of Stenographic Service, Trenton; Paul Allen, Senior Audit Account Clerk, Ewing; Karen Bawkins, Senior Clerk, Mt. Laurel; Susan Belko, Secretarial Assistant, Ewing; Harold Bloom, Principal Right of Way Appraiser, Ewing; Patricia Bowker, Secretarial Assistant, Ewing; Robert Brazer, Principal Engineer, Somerville; John Brennan, Project Engineer, East Orange; David Brooks, Project Engineer, Newark; Edwin Carle, Inspector of Permits, Netcong;

(Second row) Edward Carlin, Electrical Mechanic I, Stanhope; Charles Carmalt, Principal Transportation Planner, Ewing; Raymond Chambers, Bridge Operator, Wall Township; Janet Coleman, Secretarial Assistant, Ewing; Cliff Cornell, Auditor I, Ewing; John DeMatteo, Administrative Supervisor I, Ewing; Howard Donovan, Assistant District Supervisor, Newark; Richard Dube, Project Engineer, Ewing; Mary Duda, Secretarial Assistant, Ewing; Arthur Egan, Supervising Engineering Aide, Ewing; Arthur Eisdorfer, Project Engineer, Ewing; Minor Fulford, Landscape Supervisor, Ewing;

(Third row) Helen Giba, Secretary to the Commissioner, Ewing; Charles Grabowski, Supervising Management & Operations Analyst, Ewing; Paul Grochala, Head Clerk, Ewing; Charles Guenzel, Principal Engineer, Ewing; Robert Harris, Principal Planner, Ewing; Edgar Hellriegel, Project Engineer, Ewing; Michael Kaminsky, Principal Environmental Specialist, Ewing; Paul Kasica, Principal Engineering Aide, Ewing; John Kennedy, Foreman, Netcong; James Lewis, Regional Equipment Supervisor, Netcong; Frederick Lovett, Senior Engineer, Ewing; Vincent Lobascio, Principal Investigator, Newark;

(Fourth row) Gloria Landers, Project Specialist, Ewing; John Licko, Principal Highway Inspector, Somerville; Dorothy Maida, Technical Assistant, Ewing; George McGee, Construction Repairer I, Lodi; Robert McLaughlin, Project Engineer, Ewing; Joseph McLaughlin, Principal Engineer, Netcong; Michael Monik, Assistant Foreman, Netcong; Daniel Murphy, Principal Right of Way Negotiator, Ewing; John Mycoff, Principal Area Coordinator, Ewing; Frank Patrone, Equipment Operator, West Trenton; Stanley Ripish, Project Engineer, Ewing; David Robertson, Automotive Mechanic, Netcong;

(Fifth row) Ronald Raymond, Telecommunications System Analyst, Ewing; Judith Semler, Secretarial Assistant, Ewing; Brian Strizki, Engineer, Structural Plans and Specifications, Ewing; Theta Susas, Engineering Aide I, Fairfield; Robert Tomlinson, Highway Marking Supervisor, Ewing; Michael Unangst, Assistant Foreman, Netcong; George Weger, Highway Maintenance Foreman, Netcong; Junius White, Principal Engineer, Ewing; Ricky White, Senior Security Officer, Ewing; Patricia Wood, Senior Clerk Typist, East Brunswick.

Louis Dota, Engineering Aide I, Clinton; Carmen Ferri, Engineering Aide I, Clinton; and Leonard Karp, Engineering Aide I, Clinton, were unavailable for photos.

New Jersey
Department of Transportation
1035 Parkway Avenue, CN 600
Trenton, New Jersey 08625